

**Responses to Late Comments received on the  
Solid Waste Rule Revision Strawman (draft language)  
December 5, 2005**

- 1. Developing a list of fatal flaws that would eliminate a site from consideration at the PSI phase is inappropriate, because there usually is insufficient data to make such a determination at such an early phase.**

*Response:* There will be a wide range of data available for proposed landfill sites. If there is insufficient information to make a proper determination about site suitability at the PSI phase, then the site will be granted a 10 CSR 80-2.015(1)(A)2 preliminary site investigation approval and it will progress to the Detailed Site Investigation phase of the process.

- 2. The fatal flaw criteria, as drafted, are too vague and too broad to be useful in determining site suitability. The language on karst, for example, would have the effect of eliminating large portions of the state from consideration for landfill development. Moreover, the language, as drafted, would have the unintended consequence of providing a basis for opponents of an approved site to litigate the Department's decision. Any site containing "fractures" or "permeable geologic media" in an area that is "reasonably likely to be used for domestic drinking water" could be subject to challenge in court. All geologic units contain fractures, to some degree, and all geologic units display either primary or secondary permeability.**

*Response:* The draft rule has been drafted in a manner that seeks to balance the protection of human health and the environment with the need to construct and operate landfills. Although karst conditions, fractures and permeable geologic media are indeed referred to in the fatal flaws list, their presence alone does not render a site unsuitable. These features must be present and also provide a direct connection to the uppermost regional aquifer to evoke denial. Although "uppermost regional aquifer" has not yet been defined, the intention is to remove from consideration sites that could contaminate a regionally important water supply, not any zone of saturation (such as perched groundwater).

- 3. The draft rule is unclear as to whether it applies strictly to sanitary landfills or also affects other facilities such as utility waste landfills and demolition landfills, or whether it applies to modification or expansion of existing landfills. Rejecting sites on the basis of a PSI, without the benefit of a proper site investigation and responsible engineering design, places an inappropriate and expensive burden on electric power utility ratepayers.**

*Response:* The department is evaluating whether the draft rule language should be modified to provide special siting considerations for utility waste landfills.

- 4. The current rules provide a direct association between the science of geology and the practice of engineering. However, the DRAFT rule collectively attempts to disassociate the science of geology from the practice of engineering. This is an unacceptable concept.**

*Response:* Please refer to response #1 on the previous list of comments and responses.

- 5. The current list of fatal flaws is too broad and general.**

*Response:* It is unclear what changes could be drafted that would provide the degree of specificity that is desired. Geologic conditions are inherently difficult to quantify in a manner that encompasses all potential variability. While recommendations from the stakeholder group have

*been solicited, few have been suggested. Requiring the quantitative measurement of geologic characteristics, could actually result in fewer sites being approved, because the data may be impossible or cost-prohibitive to collect. The department will welcome any more specific recommendations through the formal comment process.*

6. **The “fatal flaws” concept is unacceptable because it “rules out” the possibility of consideration of engineering design of solutions to real or potential site flaws.**

*Response: Section 260.205, RSMo established a PSI/DSI “pass/fail” process to evaluate whether or not sites are suitable for development as a landfill.*

7. **Any potential consideration of engineering design of solutions to real or potential problems is misplaced by the draft rule in the geologic evaluation stages of the overall four-step permit process. The consideration of engineering design solutions should be a part of the construction permit process, not in the PSI or DSI process.**

*Response: The department agrees that engineering design should not be considered during the PSI/DSI process. However, the department believes that certain geologic limitations (that are not on the list of unsuitable characteristics) can be addressed through engineering and believes that this should be factored into the PSI/DSI decision-making process. This is the reason why the draft language at 10 CSR 80-2.015 (2)(A)2 has been proposed.*

8. **It is shortsighted and possibly arrogant for the department to believe that their staff’s information, interpretation of data and professional opinion about the long-term suitability of any specific piece of property is “more correct” or infallible than the opinions of other practicing professional geologists and/or engineers.**

*Response: The Department of Natural Resources is required to determine whether proposed landfill locations are appropriate for the development of landfills, as mandated by Section 260.205.2, RSMo. Because the department recognizes the importance of this responsibility, it utilizes all available resources in evaluating sites. In addition, the department works jointly with private-sector professionals to complete a drilling program and site characterization during the DSI process. The department does not allege that their staff are “more correct” or infallible. However, unlike their private sector counterparts, department staff are charged with carrying out environmental regulations in an impartial manner for the greater good of the citizens of Missouri.*

9. **The determination of decision of a governmental regulatory entity is rarely “absolute” when it comes to the right of a private or public entity to pursue HOW to use their property. Whether it be environmental laws and regulations or zoning and land use restrictions, governmental regulations and determinations are often very restrictive, but rarely “absolute”. It must be recognized that the purpose and role of the state and federal solid waste disposal laws and rules are to regulate the design and operation of solid waste facilities to prevent pollution of the air and water in compliance with other, applicable state and federal laws, as well as to protect the public health. However, the state and federal air and water pollution regulations DO ALLOW pollution to occur in a controlled, regulated and monitored manner. A societal goal of “no pollution” is noble, but unrealistic, both socially and scientifically. While the air and water regulations are often “absolute” for all practical purposes, there usually exists an avenue of technical demonstration and “appeal” in an administrative process for a private entity to make their case as to why their proposal will meet the overall goals and standards of the site and federal environmental regulations. However, this rule is written to make the “fatal flaws” perceived by the department to be absolute, with no recourse other than legal appeal and no allowance for “engineering solutions” to physical site limitations.**

Response: Section 260.205, RSMo established a PSI/DSI “pass/fail” process to evaluate whether or not sites are geologically and hydrologically suitable for development as a landfill. The purpose is not to attain a goal of “no pollution”, but rather to discourage consideration of a landfill site where unsuitable, severe natural conditions exist.

10. **The draft rule does not distinguish between the various types of solid waste disposal areas or the types of waste that will be placed in the landfill, such as “mono-fills”. It should be noted that federal Subtitle D criteria apply only to municipal solid waste landfills. It is unclear if the department intends to apply Subtitle D criteria to all landfills in Missouri. The department should clarify this.**

Response: The department is evaluating whether the draft rule language should be modified to provide special consideration for utility waste landfills.

11. **The department should allow the use of “risk-based” environmental calculations as part of a “demonstration” that an environmentally sound solid waste disposal area protective of the public health and environment could be developed at a specific, future site that has been found to have “fatal flaws”. The role of “risk-based” evaluations and management options should be further described and clarified in the language of the DRAFT rule.**

Response: The department does not believe that a quantitative risk analysis should be performed as part of the PSI/DSI process. Risk management will be addressed through the design, permitting, and management of the landfill.

12. **The draft rule does not include a “grandfather clause” for existing landfills. It is unclear how this rule will be applied to the horizontal expansion of existing, permitted landfills. The department’s intent concerning “grandfathering” existing facilities should be clarified in the language of the draft rule.**

Response: When the rule becomes final, it will not apply to existing landfills. However, it will apply to horizontal expansions of existing facilities. The department is evaluating whether a change to the draft rule language is necessary to clarify this.